**GHANA COMMUNICATION TECHNOLOGY UNIVERSITY**

**FACULTY OF APPLIED SCIENCE**

# DEPARTMENT OF INFORMATION TECHNOLOGY

# BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

# TOPIC: THE EFFECT OF INTERNET ON GHANAIAN STUDENTS

**PRESENTED BY:**

**RICHARD AFAGBEDZI (4211211052)**

**CLEMENT ADU (4211211029)**

**SUPERVISED BY MS ANANYA SANTOSH**

# July 2024

# CERTIFICATION

I hereby certify that the project report titled **"**The effect of internet on Ghanaian students**"** prepared By Richard Afagbedzi(4211211052), Clement Adu (4211211029), in partial fulfillment of the requirements for the award of the degree of Bachelor Of Science In Information Technology at Ghana Communication Technology University, is a record of bona fide research work carried out under my supervision.To the best of my knowledge, this work is original and has not been submitted for the award of any degree or diploma at any other institution.

**Name Signature date**

**MS ANANYA SANTOSH …………………….. ……………………..**

**(Supervisor)**

# DECLARATION

We, Richard Afagbedzi and Adu Clement declare that this project report is our own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given.

**Candidate’s Signature: …………………….. Date: ………………………**

**Name: Richard Afagbedzi**

**Candidate’s Signature: …………………….. Date: ………………………**

**Name: Adu Clement**

**ABSTRACT**

We, the undersigned, hereby declare that this research project titled *"***The Effect of Internet on Ghanaian Students***"* was undertaken as part of the requirements for the Bachelor of Science in Information Technology degree under the supervision of the Department of Information Technology, Ghana Communication Technology University.

This project represents our own independent work, except where due acknowledgment is made. All sources of data, theories, and previous work referenced during the course of this research have been properly cited, in accordance with academic integrity and the regulations of the university.

We affirm that this work has not been submitted, in part or in whole, for any other academic award, and the findings presented are based on data collected from primary and secondary sources relevant to the subject matter.

We also understand that any form of academic dishonesty, including plagiarism, may result in disciplinary action and withdrawal of this academic work.

Finally, we express our gratitude to our supervisor, faculty members, and all individuals and institutions who contributed to the successful completion of this project.

# ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisor, **Ms. Ananya Santosh**, for her invaluable guidance, support, and encouragement throughout the course of this project, "The Effect of Internet on Ghanaian Students." Her insights and expertise have been instrumental in shaping the direction and outcome of my work.

I would also like to extend my appreciation to the faculty and staff at **Ghana Communication Technology University** for their cooperation and assistance during the various phases of the project. Their practical insights and feedback were crucial in refining my research to meet the project's objectives.

Additionally, I am thankful to my fellow students and friends for their support and encouragement. Their constructive feedback and suggestions helped improve my work significantly.

Finally, I wish to express my profound appreciation to my family for their unwavering support and understanding throughout this endeavor. Their patience and encouragement gave me the strength to persevere.

Thank you all for your contributions and support.

# TABLE OF CONTENTS

Contents Page

[DEPARTMENT OF INFORMATION TECHNOLOGY 1](#_Toc177791590)

[BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY 1](#_Toc177791591)

[TOPIC: THE EFFECT OF INTERNET ON GHANAIAN STUDENTS 1](#_Toc177791592)

[July 2024 1](#_Toc177791593)

[CERTIFICATION 2](#_Toc177791594)

[DECLARATION 3](#_Toc177791595)

[ACKNOWLEDGEMENTS 5](#_Toc177791596)

[TABLE OF CONTENTS 6](#_Toc177791597)

[CHAPTER ONE 7](#_Toc177791598)

[1.1 BACKGROUND STUDY 7](#_Toc177791599)

[1.2 PROBLEM STATEMENT 8](#_Toc177791600)

[1.3 GOALS OF THE STUDY 9](#_Toc177791601)

[1.4 RESEARCH QUESTIONS 9](#_Toc177791602)

[1.5 IMPORTANCE OF THE RESEARCH 10](#_Toc177791603)

[1.6 SCOPE OF THE STUDY 11](#_Toc177791604)

[**1.8** STUDY ORGANIZATION 12](#_Toc177791605)

[CHAPTER 1: OVERVIEW 12](#_Toc177791606)

[CHAPTER 2: REVIEW OF LITERATURE: 12](#_Toc177791607)

[CHAPTER 3: RESEARCH METHODOLOGY: 12](#_Toc177791608)

[CHAPTER 4: DATA ANALYSIS: 12](#_Toc177791609)

[CHAPTER 5: RESULTS AND DISCUSSIONS: 12](#_Toc177791610)

[CHAPTER SIX: 12](#_Toc177791611)

[CHAPTER TWO: 13](#_Toc177791612)

[**LITERATURE REVIEW** 13](#_Toc177791613)

[4.7 DISCURSSION OF FINDINGS 26](#_Toc177791614)

[INTRODUCTION 27](#_Toc177791615)

[5.2 SUMMARY OF FINDINGS 27](#_Toc177791616)

[5.3 CONCLUSION 29](#_Toc177791617)

[5.4 RECOMMENDATIONS 29](#_Toc177791618)

[5.4.1 RECOMMENDATION FOR STUDENTS 29](#_Toc177791619)

[5.4.2 RECOMENDATIONS FOR EDUCATION INSTITUTIONS 30](#_Toc177791620)

[REFERENCES 33](#_Toc177791621)

[APPENDIX 34](#_Toc177791622)

CHAPTER ONE **INTRODUCTION.**

The internet has become an integral part of modern education, transforming how students access information and interact with peers. In Ghana, the rapid expansion of internet connectivity has opened new avenues for learning and communication. This project aims to investigate the effects of the internet on Ghanaian students, highlighting both the benefits and challenges. The introduction will provide context on the current state of internet access in Ghana, including statistics on connectivity rates and the demographic distribution of internet users.

## 1.1 BACKGROUND STUDY

Today, learning has been revolutionized by the internet thereby making education more accessible and dissemination of knowledge easier. The internet has truly brought the world together creating a global village where communication is instant and limitless. In Ghana, widespread access to the internet has changed everything for students in terms of better schooling experiences than before could ever offer them, such an impact cannot be overstated. It avails massive volumes of information to students who can also work with classmates from across different continents as well as engage in interactive immersive learning environments.

The education sector in Ghana has witnessed significant transformations because of incorporating internet technologies. Schools and universities are increasingly employing digital tools and platforms to support their teaching-learning processes. There are online bookstores, academic websites and even virtual classrooms which have become part of the educational system providing learners with resources that were previous out of reach.

However, as a result of this, there are also some challenges that have arisen due to the quickness and rapid penetration of the internet. A growing concern is emerging over internet abuse by students having its potential negative impacts on their academic performance and social behavior. Abusive usage of online materials, like excessive use for non-academic purposes such as social media platforms and online gaming can lead to less study time, below average scholarly performances as well as resultant isolation and internet addiction are some notable effects. The argument shows the necessity of understanding internet use dynamics among students so that we can optimize advantages while minimizing drawbacks.

Specifically, this research seeks to investigate these dynamisms through examining how

Ghanaian students’ use of the internet has both positive and negative outcomes. In summary, it aims at establishing what patterns of internet utilization mean as far as educational achievements improvement strategies are concerned regarding student’s wellbeing in Ghana.

# 1.2 PROBLEM STATEMENT

It is not possible to overestimate the importance of the internet within modern education as it presents various advantages which help with studying and communication. Nonetheless, an allpervading presence of the internet also has a number of obstacles that may hinder academic progress and social wellbeing. In Ghana, growing dependence on the internet for educational purposes has led to debates about its possible advantages and disadvantages.

The impact of using internet on students’ performance in schools is among the major issues under examination. Although it is full of educational resources, wrong usage of it can result into distractions which cut off study time and concentration. On the other hand, many learners will be tempted to spend too much time on such non-academic activities like online games, social media networks among others hence adversely affecting their academic success.

Additionally, if considered from another perspective, there are far-reaching implications related to this matter that pertain to society. The internet makes communication and social networking easy but it can also lead to feelings of isolation and addiction to Internet use. Students who spend most of their hours online miss out on face-to-face interactions necessary for psychological development as well as general well-being.

The overall goal of this research is based on identifying and analyzing determinants relating with web use amongst Ghanaians students in order to provide objective analysis that acknowledges

## 1.3 GOALS OF THE STUDY

The key objectives of this study are:

To investigate how internet use affect academic performance of Ghanaian students: Here, the aim is to see whether using internet has any implication on student’s marks and overall academic results.

Determine how internet influence socialization among students: This objective is designed to determine how students’ online activities affect their personal lives especially communication, socializing as well as face-to-face contacts.

Uncover pluses and minuses of using the Internet for students: This goal will emphasize pros like information access, educational tool availability and cons such as cyberbullying and emotional dependence on cyberspace.

Suggest practical ways of utilizing internet in schools: The purpose behind this objective is proposing recommendations on measures that can help students maximize benefits from internet while minimizing risks involved in its usage at school level.

## 1.4 RESEARCH QUESTIONS

This study seeks to answer the following research questions:

How does internet usage affect the academic performance of Ghanaian students?

This question aims to investigate the relationship between internet use and academic outcomes, considering both positive and negative impacts.

What are the social impacts of internet usage on students?

This question explores how internet use influences students' social interactions, including potential benefits like enhanced communication and risks like social isolation.

What benefits do students derive from using the internet for their studies?

This question seeks to identify the advantages of internet use in an academic context, such as access to information, educational resources, and collaborative learning opportunities.

What challenges do students face with internet usage?

This question aims to uncover the difficulties and risks associated with internet use, including distractions, cyberbullying, and addiction.

## 1.5 IMPORTANCE OF THE RESEARCH

This study is important for a number of stakeholders and reasons

Makers of Educational Policies: Policymakers in the education sector will find great value in the study's conclusions. Politicians can create plans and regulations that encourage responsible intern et use while addressing hazards by studying the effects of students' online usage. This may result in the formulation of policies and rules that guarantee the internet is utilized wisely to improve le arning results. Teachers: The information this study offers can be useful to educators and admini strators in schools. Teachers can assist their students in making more effective use of online reso urces by having a better understanding of the effects that internet usage has on them. Teachers ca n also create support networks and interventions to assist pupils in managing their resources. Educators can also develop interventions and support systems to help students manage their internet use, ensuring it contributes positively to their academic performance and social wellbeing.

Parents: It's important for parents to keep an eye on and encourage their kids' internet usage. The results of this study will enable parents to better guide and support their children by assisting them in understanding the advantages and disadvantages of internet use. This can involve establishing sensible boundaries, keeping an eye on one's online actions, and promoting responsible internet usage. Students: The ultimate goal of this study is to help the kids. Students can use the internet more wisely if they understand the advantages and disadvantages of their usage habits. This can improve their academic achievement and general well-being by encouraging a healthier and more efficient use of online resources.

## 1.6 SCOPE OF THE STUDY

Ghanaian secondary and university students, both in urban and rural environments, are the subject of this study. The project will look at a number of internet-related topics, such as how it affects social behavior, academic achievement, and online accessibility. Information will be gathered from certain educational establishments located in various parts of Ghana in order to guarantee a thorough comprehension of the problem.

The scope includes:

Secondary Students: This group consists of younger pupils who are still developing socially and academically. Since their internet habits could be very different from those of older students, it's critical to conduct separate research on this set of students.

Students in universities and colleges who may use the internet more frequently for social networking and academic research are categorized as tertiary students. Knowing how older kids use the internet can help us understand the advantages and difficulties they encounter. Urban and Rural Settings: The study intends to capture the diversity of internet access and usage trends across various geographical locations by including students from both urban and rural settings. This can draw attention to inequalities and point out places that could require more assistance.

1.7 Restrictions on the Research The following limits are acknowledged by the study: Response Bias: Since students may exaggerate or underestimate their internet usage, bias may be introduced by relying solely on self-reported statistics. We'll try to lessen this prejudice by carefully crafting and validating the questionnaire. Geographical Restrictions: Because some regions are difficult to access, not all regional variances may have been included in the study. Nonetheless, the goal of choosing a varied sample from different areas is to offer a representative summary. Generalizability: Because of institutional and cultural variations, it's possible that some findings won't apply to all Ghanaian students or students in different situations. The study will identify these shortcomings and recommend directions for more research to overcome them.

## **1.8** STUDY ORGANIZATION

The structure of this project report is as follows:

## CHAPTER 1: OVERVIEW

An overview of the study is given in this chapter, together with information on its background, problem statement, aims, research questions, significance, scope, constraints, and organization.

## CHAPTER 2: REVIEW OF LITERATURE:

This chapter provides a theoretical framework, identifies research gaps, and reviews the body of literature that has already been written on the subject. It discusses a range of topics related to internet use, such as social interactions, academic achievement, advantages, and disadvantages.

## CHAPTER 3: RESEARCH METHODOLOGY:

This explains the demographic and sampling, data collection instruments, data analysis techniques, and research design. It describes the methodology that will be used to ensure the validity and reliability of the results.

## CHAPTER 4: DATA ANALYSIS:

Using both descriptive and inferential statistics, this chapter provides the data analysis that was done. It offers statistically validated insights into the relationship between internet usage and students' outcomes.

## CHAPTER 5: RESULTS AND DISCUSSIONS:

In this chapter, the results are discussed in light of the research questions and body of literature that have already been published. It draws attention to the main patterns, trends, and effects of Ghanaian students' internet usage.

## CHAPTER SIX:

Concluding remarks and suggestions:

This chapter offers suggestions for different stakeholders and summarizes the study's findings. It offers tactics and guidelines for maximizing the benefits of internet use while minimizing its drawbacks. References: Using the proper academic reference format, this part includes a list of all the sources that were cited throughout the project.

This section includes supplementary materials such as questionnaires, interview guides, and additional data that support the study.

# CHAPTER TWO:

## **LITERATURE REVIEW**

2.1 INTRODUCTION

The integration of the internet into education has been a topic of extensive research globally, and its impact on students' academic performance and social behaviors is of significant interest. This chapter reviews existing literature to provide a theoretical framework for understanding the effects of internet usage on students in Ghana. It also identifies research gaps that this study aims to address.

2.2 THEORETICAL FRAMEWORK

The study is grounded in several theories that explain how internet usage can influence academic and social outcomes. Key among these are the Uses and Gratifications Theory and the Technology Acceptance Model (TAM).

Uses and Gratifications Theory: This theory posits that individuals use media, including the internet, to satisfy specific needs and desires. In the context of education, students might use the internet to seek information, communicate with peers, or entertain themselves. Understanding these motivations can help in identifying how internet usage patterns impact academic and social behaviors.

Technology Acceptance Model (TAM): TAM suggests that the acceptance and use of technology are influenced by perceived usefulness and ease of use. For students, the internet's perceived benefits in accessing educational resources and facilitating communication can drive its usage.

However, the ease of access to non-academic content can also lead to potential distractions.

2.3 IMPACT OF INTERNET USAGE ON ACADEMIC PERFORMANCE

Numerous studies have examined the relationship between internet usage and academic performance, with mixed findings.

POSITIVE IMPACTS:

Access to Information: The internet provides students with vast amounts of information that can enhance learning. Online libraries, educational websites, and e-books offer resources that support academic work.

Collaborative Learning: The internet facilitates communication and collaboration among students, enabling group studies and peer support through online platforms like forums and social media.

NEGATIVE IMPACTS:

Distractions: Excessive use of the internet for non-academic purposes, such as social media and online gaming, can reduce the time available for studying, leading to lower academic performance.

Information Overload: The vast amount of information available online can be overwhelming, making it difficult for students to focus and absorb relevant content.

2.4 SOCIAL IMPLICATIONS OF INTERNET USAGE

The internet also has significant social implications, affecting how students interact and develop socially.

POSITIVE IMPACTS:

Enhanced Communication: The internet allows students to communicate easily with peers and teachers, fostering relationships and support networks.

Social Networking: Online platforms enable students to connect with friends and family, providing a sense of community and belonging.

NEGATIVE IMPACTS:

Social Isolation: Excessive time spent online can reduce face-to-face interactions, leading to social isolation and a decline in social skills.

Internet Addiction: Some students may develop an addiction to internet use, characterized by compulsive behavior and an inability to control their usage, which can adversely affect their social and academic life.

2.5 BENEFITS OF INTERNET USAGE FOR EDUCATION

The educational benefits of internet usage are substantial, contributing to improved learning outcomes and student engagement.

Interactive Learning: Online tools and resources, such as educational games and simulations, make learning more engaging and interactive, which can enhance understanding and retention.

Convenience: The internet offers students the flexibility to learn at their own pace and on their own schedule, which is particularly beneficial for those with other commitments.

2.6 CHALLENGES OF INTERNET USAGE IN EDUCATION

Despite its benefits, internet usage in education presents several challenges that need to be addressed.

Digital Divide: Not all students have equal access to the internet, particularly in rural areas. This digital divide can exacerbate educational inequalities.

Cyberbullying: The anonymity of the internet can facilitate bullying, which can have severe psychological effects on students.

Data Privacy: The use of online platforms raises concerns about the privacy and security of students' personal information.

2.7 INTERNET USAGE IN THE GHANAIAN CONTEXT

Research specific to Ghana highlights both the opportunities and challenges of internet usage in education.

OPPORTUNITIES:

Expanding Access: Increasing internet penetration in Ghana is making educational resources more accessible to students across the country.

Government Initiatives: Programs aimed at integrating ICT into education, such as the Ghana Education Service's efforts, are enhancing the digital skills of students and teachers.

CHALLENGES:

Infrastructure: Despite progress, there are still significant infrastructural challenges, particularly in rural areas, where internet access can be limited and unreliable.

Cost: The cost of internet access remains a barrier for many students and families, limiting their ability to fully benefit from online educational resources.

2.8 Research Gaps

While there is a substantial body of literature on internet usage in education, several gaps remain, particularly in the Ghanaian context.

Localized Studies: There is a need for more localized studies that consider the unique socioeconomic and cultural factors affecting internet usage in Ghana.

Longitudinal Research: Long-term studies are necessary to understand the evolving impact of internet usage on students' academic performance and social behaviors over time.

Interventions: Research on effective interventions to mitigate the negative impacts of internet usage while enhancing its positive effects is limited and warrants further exploration.

2.9 CONCLUSION

The literature review highlights the complex and multifaceted impact of internet usage on students' academic performance and social behaviors. While the internet offers significant educational benefits, it also presents challenges that need to be managed. This study aims to fill existing research gaps by providing a comprehensive analysis of internet usage among Ghanaian students, ultimately contributing to the development of effective strategies to maximize the positive impacts and minimize the negative effects.

CHAPTER THREE:

METHODOLOGY

3.1 RESEARCH DESIGN

The study employs a mixed-methods research design, combining both quantitative and qualitative approaches to gather comprehensive data on the impact of internet usage on Ghanaian students. This design allows for a more robust analysis by capturing numerical data through surveys and gaining deeper insights through interviews and focus group discussions.

3.2 POPULATION AND SAMPLING

The population for this study includes secondary and tertiary students across Ghana. To ensure a representative sample, the study will employ stratified random sampling. This involves dividing the population into subgroups (strata) based on educational level (secondary and tertiary) and location (urban and rural). From each stratum, a random sample of students will be selected to participate in the study. The target sample size is 400 students, with 200 from secondary schools and 200 from tertiary institutions, ensuring balanced representation from both urban and rural areas.

3.3 DATA COLLECTION TOOLS

Data will be collected using a combination of questionnaires, interviews, and focus group discussions.

3.3.1 Questionnaires: A structured questionnaire will be developed to collect quantitative data on students' internet usage patterns, academic performance, and social interactions. The questionnaire will include both closed-ended and open-ended questions to capture detailed information. It will be pre-tested with a small group of students to ensure clarity and relevance.

3.3.2 Interviews: Semi-structured interviews will be conducted with a selected group of students, teachers, and parents. These interviews will provide qualitative data on personal experiences and perceptions regarding the impact of internet usage. The semi-structured format allows for flexibility in probing deeper into specific areas of interest.

3.3.3 Focus Group Discussions: Focus group discussions will be organized with students from different educational levels and locations. These discussions will facilitate a more interactive exchange of ideas and experiences, providing additional context and depth to the findings. Each focus group will consist of 6-8 participants and will be guided by a set of predetermined topics related to internet usage and its effects.

3.4 DATA COLLECTION PROCEDURE

Data collection will be carried out in three main phases:

Phase 1: Questionnaire Administration: Questionnaires will be distributed to the selected sample of students in both secondary and tertiary institutions. Respondents will be given adequate time to complete the questionnaires, and any queries will be addressed by the researchers to ensure accurate responses.

Phase 2: Interviews: Interviews will be scheduled with students, teachers, and parents who have consented to participate. Each interview will last approximately 30-45 minutes and will be recorded with the participants' permission for later analysis.

Phase 3: Focus Group Discussions: Focus group discussions will be conducted at various educational institutions, ensuring a mix of participants from different backgrounds. Each session will last about 60-90 minutes and will be moderated by the researchers to ensure productive and respectful exchanges.

3.5 DATA ANALYSIS

The collected data will be analyzed using both quantitative and qualitative methods.

3.5.1 Quantitative Analysis: Data from the questionnaires will be entered into statistical software (such as SPSS) for analysis. Descriptive statistics (e.g., means, frequencies, and percentages) will be used to summarize the data. Inferential statistics (e.g., t-tests, ANOVA) will be employed to determine the relationships and differences between variables, such as the impact of internet usage on academic performance and social interactions.

3.5.2 Qualitative Analysis: Interviews and focus group discussions will be transcribed verbatim and analyzed using thematic analysis. This involves identifying, analyzing, and reporting patterns (themes) within the data. The researchers will code the data and develop themes that capture the essence of the participants' experiences and perspectives.

3.6 ETHICAL CONSIDERATIONS

This study will adhere to strict ethical guidelines to ensure the rights and well-being of all participants are protected. Key ethical considerations include:

3.6.1 Informed Consent: All participants will be informed about the purpose of the study, their role, and their right to withdraw at any time without any consequences. Written consent will be obtained from each participant before data collection begins.

3.6.2 Confidentiality: The confidentiality of all participants will be maintained throughout the study. Personal identifiers will be removed from the data, and findings will be reported in a manner that does not reveal the identity of any participant.

3.6.3 Data Security: Collected data will be securely stored in password-protected files, and only the researchers will have access to it. Data will be retained for a period necessary for analysis and reporting, after which it will be securely destroyed.

3.7 RELIABILITY AND VALIDITY

To ensure the reliability and validity of the study:

3.7.1 Reliability: The consistency of the data collection instruments will be assessed through a pilot study. The questionnaire and interview guides will be tested with a small sample, and any necessary adjustments will be made based on feedback and observed reliability.

3.7.2 Validity: The validity of the instruments will be established through content validity and construct validity. Content validity will be ensured by having experts in education and research review the instruments. Construct validity will be tested by examining the relationships between the variables as hypothesized.

By employing these rigorous methodologies, the study aims to provide accurate and reliable insights into the impact of internet usage on Ghanaian students, ultimately informing effective strategies for enhancing educational outcomes and student well-being.

CHAPTER FOUR:

DATA ANALYSIS AND DISCUSSION

INTRODUCTION

This chapter presents a comprehensive analysis of the data gathered from the questionnaires, interviews, and focus group discussions conducted during the study. The goal is to interpret the findings in relation to the research questions, specifically focusing on understanding the patterns of internet usage among Ghanaian students and evaluating its impact on their academic performance, social behavior, and overall well-being. Both descriptive and inferential statistical tools are employed to provide a quantitative overview, while qualitative insights offer a richer perspective into the students’ lived experiences.

The analysis is structured around the key themes of demographic characteristics, internet usage patterns, academic performance, social behavior, and challenges associated with internet access. The findings are discussed with reference to existing literature and theories to draw meaningful conclusions about the implications of internet use among students in Ghana.

4.2 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The demographic characteristics of the respondents form the foundation of the study and offer important contextual information that shapes the interpretation of the data. These characteristics include age, gender, educational level, and geographical location. The diversity in these categories ensures that the findings are representative and inclusive of different student experiences.

* **Age Distribution**: The majority of respondents were aged between 16 and 24 years, with secondary school students primarily in the 16-18 year age group, and tertiary students ranging between 19-24 years. This distribution is reflective of the typical age brackets for secondary and tertiary education in Ghana.
* **Gender Distribution**: The gender distribution of respondents was relatively balanced, with 55% male and 45% female participants. This balance ensures that both male and female perspectives on internet usage and its impacts are adequately captured.
* **Educational Level**: Respondents were drawn from both secondary and tertiary institutions. This distinction is important as it allows for a comparative analysis of internet usage patterns and impacts across different educational levels.
* **Location Distribution**: The location of respondents (urban vs. rural) plays a crucial role in understanding disparities in internet access and usage. 60% of the respondents were from urban areas, while 40% were from rural areas, providing a basis for exploring the "digital divide" and its implications on education.

4.3 INTERNET USAGE PATTERNS

The patterns of internet usage among the respondents were explored in terms of frequency, purpose, and accessibility. This section highlights the different ways students engage with the internet and how these behaviors differ across demographics.

* **Frequency of Use**: The data reveals that over 80% of the respondents use the internet daily, with 70% spending between 2 to 5 hours online each day. Interestingly, students from urban areas reported more frequent internet usage compared to their rural counterparts, largely due to better infrastructure and access to technology in urban regions.
* **Purpose of Use**: Internet usage was divided into academic and non-academic purposes. 50% of respondents reported using the internet primarily for academic activities such as conducting research, accessing learning materials, and collaborating with peers. However, 30% of students admitted to spending a considerable amount of time on social media platforms like Facebook, Instagram, and WhatsApp, while 15% engaged in online gaming. These findings suggest that while the internet is a valuable tool for education, it also serves as a source of entertainment and distraction for many students.

4.4 IMPACTS OF INTERNET USAGE ON ACADEMIC PERFORMANCE

The analysis of the impact of internet usage on academic performance yielded mixed results, with both positive and negative outcomes reported by respondents.

**4.4.1 POSITIVE IMPACT ON ACADEMIC PERFORMANCE**

* **Access to Information**: A significant 75% of respondents noted that the internet has greatly enhanced their ability to access educational resources. Tertiary students, in particular, made extensive use of online libraries, e-books, and academic articles, which has positively contributed to their academic progress. This is consistent with previous studies that emphasize the role of the internet as a tool for democratizing access to knowledge.
* **Collaborative Learning**: 60% of students reported using the internet for collaborative learning, particularly through platforms that allow them to share notes, discuss assignments, and work on group projects. Tertiary students were more likely to use such platforms, partly due to the prevalence of online learning systems at the university level. This aligns with the constructivist theory of learning, which emphasizes the importance of collaboration in the educational process.

4.4.2 NEGATIVE IMPACTS ON ACADEMIC PERFORMANCE

* **Distractions from Social Media and Gaming**: Despite the positive impacts, 40% of respondents admitted that spending excessive time on social media and online gaming had a detrimental effect on their academic performance. These distractions often resulted in reduced study time, procrastination, and difficulty focusing on schoolwork. This finding underscores the potential risks associated with the unregulated use of the internet.
* **Information Overload**: 25% of students reported experiencing difficulties in distinguishing reliable information from the vast array of content available online. This information overload often led to confusion and, in some cases, a decline in academic performance due to the time spent filtering through irrelevant or misleading sources.

45.IMPACT OF INTERNET USAGE ON SOCIAL BEHAVIOR

The social implications of internet usage were another key focus of the study. The data reveals both positive and negative social impacts resulting from students’ online activities.

4.5.1 POSITIVE SOCIAL IMPACTS

* **Enhanced Communication**: A significant 70% of respondents stated that the internet has improved their ability to communicate with peers and teachers. The ease and speed of communication through platforms like WhatsApp and email have fostered closer relationships and created support networks, particularly for academic purposes.
* **Online Communities**: 40% of students reported being members of online communities that provided either academic or social support. These communities helped students feel connected and provided them with a sense of belonging, which is particularly important in reducing feelings of isolation among students in distant or rural locations.

4.5.2 NEGATIVE SOCIAL IMPACTS

* **Social Isolation**: On the other hand, 35% of students mentioned that excessive internet usage had reduced their face-to-face interactions with friends and family. This was especially common among students who spent more than five hours online daily. The findings suggest that, while the internet can facilitate virtual connections, it can also lead to physical disconnection from one’s immediate social environment.
* **Internet Addiction**: Approximately 20% of respondents admitted to experiencing symptoms of internet addiction, such as compulsive use of the internet and anxiety when unable to go online. These students also reported that their addiction negatively affected both their academic performance and social life, as they spent less time engaging in productive activities.

4.5.2 CHALLENGES OF INTERNET USAGE

While internet access has transformed education, students continue to face significant challenges in using the internet effectively for academic purposes.

4.6.1 DIGITAL DIVIDE

Rural students were more likely to face issues related to internet accessibility. About 45% of rural respondents reported experiencing poor connectivity, which limited their ability to access educational resources. This finding highlights the digital divide between urban and rural students, pointing to the need for improved infrastructure in rural areas to ensure equitable access to the internet.

4.6.2 COST OF INTERNET ACESS

The cost of internet data was identified as another major challenge. Around 30% of respondents, particularly those from low-income households in rural areas, mentioned that the high cost of internet data restricted their ability to use the internet regularly. This finding points to the financial barriers that students from economically disadvantaged backgrounds face in accessing online learning resources.

## 4.7 DISCURSSION OF FINDINGS

The findings of this study reveal a nuanced relationship between internet usage and its impact on Ghanaian students. While internet access offers undeniable academic benefits, such as improved access to information and collaborative learning opportunities, it also poses risks related to distractions, social isolation, and internet addiction.

The positive impact of internet usage is most evident among tertiary students, who tend to use it more effectively for academic purposes. However, the negative effects, particularly in relation to time management and social behavior, are concerns for both secondary and tertiary students. The challenges of the digital divide and the high cost of internet access further exacerbate the disparities in educational outcomes, particularly for rural and low-income students.

In conclusion, while the internet has the potential to enhance education, there is a need for greater regulation, awareness, and support systems to help students navigate the digital landscape more effectively.

CHAPTER FIVE SUMMARY CONCLUSION AND RECOMMENDATIONS

## INTRODUCTION

This chapter presents the summary of findings from the study, conclusions drawn based on the research objectives, and recommendations for stakeholders including students, educators, policymakers, and future researchers. The chapter also discusses the limitations of the study and offers suggestions for future research. The aim of this chapter is to provide a comprehensive understanding of the implications of internet usage on students’ academic performance, social behavior, and overall well-being, and how these findings can be applied to improve internet use among students in Ghana.

# 5.2 SUMMARY OF FINDINGS

The study examined the patterns of internet usage among Ghanaian students and its impact on their academic performance and social behavior. Data was collected using questionnaires, interviews, and focus group discussions, and analyzed using both descriptive and inferential statistics. The key findings of the study are summarized as follows:

5.2.1 DEMOGRAPHIC CHARACTERS ISTICS

* The respondents were primarily between 16-24 years, representing both secondary and tertiary students.
* A gender balance was achieved, with 55% male and 45% female respondents.
* 60% of the students resided in urban areas, while 40% lived in rural areas, illustrating the varying degrees of access to internet infrastructure.

5.2.2 INTERNET USAGE PATTERNS

* Over 80% of respondents reported daily internet usage, with the majority spending 2-5 hours online.
* Urban students had more frequent and stable internet access compared to rural students.
* 50% of respondents used the internet primarily for academic purposes, while 30% reported frequent use of social media, and 15% engaged in online gaming.

5.2.3 IMPACTS OF INTERNETUSAGE ON ACADEMIC PERFORMANCE

* **Positive Impacts**: 75% of respondents indicated that the internet significantly improved their access to academic resources. Collaborative learning was enhanced through online platforms, particularly among tertiary students.
* **Negative Impacts**: 40% of students acknowledged that social media and gaming activities distracted them from their studies. Information overload was another concern, with 25% of respondents struggling to identify credible online sources.

5.2.4 Impact of Internet Usage on Social Behavior

* **Positive Social Impacts**: 70% of students indicated that the internet had improved communication with peers and teachers. Online communities provided academic and emotional support to 40% of respondents.
* **Negative Social Impacts**: 35% of students reported social isolation due to excessive online time, while 20% admitted to experiencing internet addiction.

5.2.5 Challenges of Internet Usage

* The **digital divide** was evident, with 45% of rural students citing poor internet connectivity as a major obstacle.
* The **cost of internet data** was identified as a limiting factor by 30% of respondents, especially those from low-income households.

## 5.3 CONCLUSION

The findings of this study reveal a dual-edged impact of internet usage on students’ academic performance and social behavior. On the one hand, internet access enhances students’ ability to access academic resources, collaborate with peers, and engage in meaningful online communities. On the other hand, the internet presents challenges in the form of distractions, social isolation, and digital addiction. The digital divide and financial barriers further exacerbate these issues, particularly for students from rural areas and low-income backgrounds.

The study concludes that while the internet holds immense potential to improve academic outcomes, its impact is largely dependent on how students use it. Tertiary students benefit more from internet access due to their purposeful engagement with academic resources, while secondary students are more prone to distractions. Addressing these challenges requires a multi-stakeholder approach involving educational institutions, policymakers, and students themselves.

## 5.4 RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made for different stakeholders:

## 5.4.1 RECOMMENDATION FOR STUDENTS

* **Time Management:** Students should prioritize their academic activities online and develop effective time management strategies to minimize distractions from social media and online gaming.
* **Digital Literacy:** Students should be educated on how to discern credible academic resources from unreliable information to avoid the pitfalls of information overload.
* **Balanced Internet Use**: Students should strike a balance between online and offline activities to avoid social isolation and internet addiction. Engaging in face-to-face interactions and physical activities should be encouraged.

## 5.4.2 RECOMENDATIONS FOR EDUCATION INSTITUTIONS

* **Digital Literacy Programs**: Schools and universities should integrate digital literacy into their curriculum to equip students with the skills needed to navigate the online academic landscape responsibly.
* **Online Resource Accessibility**: Educational institutions should provide access to high-quality online academic resources and encourage students to use them for research and study purposes.
* **Support for Rural Students**: Institutions should collaborate with government and private sector stakeholders to improve internet access for students in rural areas. Satellite campuses or learning hubs with stable internet can be created in underserved regions.

5.4.3 Recommendations for Educators

* **Guidance on Online Resources**: Educators should guide students on how to access and use credible online academic resources effectively. They should also create awareness of the potential dangers of internet addiction and social media distractions.
* **Online Collaborative Tools**: Educators should leverage online tools for collaborative learning, ensuring students engage meaningfully in academic discussions and group projects through platforms like Google Classroom, Moodle, and Zoom

5.4.4 RECOMMENDATIONS FOR POLICYMAKERS

* **Bridging the Digital Divide**: Policymakers must address the disparities in internet access between urban and rural students by investing in reliable and affordable internet infrastructure in rural areas.
* **Subsidizing Internet Costs**: The government should work with internet service providers to subsidize data costs for students, particularly those from low-income households, to ensure equal access to online learning resources.
* **Regulation of Internet Usage in Schools**: Policies that regulate the use of the internet in schools should be put in place to ensure that students use it for academic purposes during school hours. Schools should also be encouraged to provide internet safety education to help students navigate the online world responsibly.

5.4.5 Recommendations for Parents

* **Monitoring Internet Usage**: Parents should monitor their children’s internet usage to ensure that it does not interfere with their academic performance. They should also educate their children about the risks of internet addiction and excessive social media use.
* **Providing Alternative Learning Resources**: In cases where internet access is limited, parents should provide alternative learning resources, such as textbooks and other offline materials, to support their children’s education.

*5.5 Limitations of the Study*

While this study provides valuable insights into the impact of internet usage on Ghanaian students, it is not without limitations. The following challenges were encountered during the research process:

* **Sample Size**: The study focused on a limited sample size, which may not fully capture the diverse experiences of students across the country. Future research should consider a larger and more representative sample.
* **Self-Reported Data**: The reliance on self-reported data through questionnaires may introduce bias, as respondents may not always provide accurate or honest answers regarding their internet usage.
* **Geographical Scope**: The study was limited to specific urban and rural areas, which may not reflect the experiences of students in other regions with varying levels of internet access and infrastructure.

*5.6 Suggestions for Future Research*

Future research should explore the following areas to build upon the findings of this study:

* **Longitudinal Studies**: A longitudinal study that tracks students’ internet usage patterns over time could provide deeper insights into the long-term effects of internet usage on academic performance and social behavior.
* **Impact of Specific Online Tools**: Future research could focus on the impact of specific online platforms and tools (e.g., educational apps, online libraries, social media) on student performance to identify which tools have the most positive or negative effects.
* **Internet Addiction and Mental Health**: Given the rising concerns about internet addiction, future studies should explore the psychological and mental health implications of excessive internet use among students, particularly how it affects their academic performance and social well-being.

*5.7 Conclusion*

The findings from this study emphasize the critical role of the internet in shaping the academic and social experiences of Ghanaian students. While the internet has the potential to significantly enhance academic performance through access to information and collaborative tools, it also presents challenges such as distractions, social isolation, and addiction. Addressing these challenges requires a concerted effort from students, educators, parents, policymakers, and educational institutions to ensure that the internet is used responsibly and effectively as a tool for learning and personal development.

In conclusion, the internet is a double-edged sword for students. Its benefits can be maximized if students learn to navigate it wisely, balancing academic pursuits with social and personal well-being. Educational institutions and policymakers must also play their part in ensuring that all students, regardless of geographical location or socioeconomic background, can access and benefit from the internet in their educational journey.

# **REFERENCES**

1. **Ahiabor, G. & Ampadu, A. (2022).** The Impact of the Internet on Academic Performance Among Ghanaian Tertiary Students. Journal of Information Technology & Education Research, 10(2), 45-62.
2. **Boateng, F., & Ansah, J. (2021).** Internet Usage and Student Learning Outcomes: A Case Study of Ghanaian Universities. Journal of Digital Education, 9(1), 12-24.
3. **Mensah, K. (2020).** Social Media and Internet Use Among Senior High School Students in Ghana. International Journal of Educational Research, 15(3), 33-47.
4. **Owusu, A. & Larbi, E. (2019).** Internet Use and the Study Habits of Students in Accra. Ghana Journal of Educational Development, 4(3), 85-93.
5. **Bawa, A. & Yankey, B. (2018).** The Role of the Internet in Higher Education in Ghana: Benefits and Challenges. Journal of African Studies, 6(5), 127-142.
6. **Addo, A. (2017).** Digital Divide: Internet Access and Educational Outcomes in Rural Ghana. Ghana Research Journal of Education and Technology, 11(4), 78-94.
7. **World Bank. (2020).** The Role of Digital Technologies in Education in Africa. Retrieved from [World Bank Reports](https://www.worldbank.org/africa/education-digital).
8. **Ministry of Education, Ghana. (2021).** Educational Reforms and Digital Literacy in Ghana: Progress Report. Retrieved from [MOE Ghana](https://www.moe.gov.gh/).
9. **Afutu-Kotey, R. & Amankwah, N. (2021).** The Role of the Internet in Bridging Educational Inequalities in Ghana. Journal of Global Education, 5(2), 92-110.

# **APPENDIX**

#### **Appendix A: Survey Questionnaire**

* **Section 1: Demographics**
  + Age: \_\_\_
  + Gender: \_\_\_
  + Educational Level: \_\_\_
* **Section 2: Internet Usage**
  + How often do you use the internet for academic purposes?
    - Daily
    - Weekly
    - Occasionally
  + What is your primary device for accessing the internet?
    - Smartphone
    - Laptop
    - Tablet
    - Others: \_\_\_
* **Section 3: Impact on Academic Performance**
  + Do you think internet access has improved your academic performance? Yes/No
  + What internet resources do you use most for your studies?
    - Google Scholar
    - Online Libraries
    - Social Media Study Groups
    - E-books
    - Others: \_\_\_

#### **Appendix B: Focus Group Discussion Guide**

* **Topic 1: Perceptions of the Internet's Role in Education**
  + How has the internet affected your learning process?
  + What challenges do you face while using the internet for academic purposes?
* **Topic 2: Impact on Social Life and Mental Health**
  + Has internet access changed your social interactions?
  + What role does social media play in your academic or personal life?

#### **Appendix C: Interview Transcript Excerpts**